

CLAIMS

1. A method of remotely retrieving the state of at least one enterprise device, said method comprising:
 - providing a reporting and maintenance computer system;
 - connecting a superintendent system to the reporting and maintenance computer system, said connecting producing a first communications channel;
 - connecting an enterprise to the reporting and maintenance computer system, the enterprise including at least one enterprise device that can be enabled to send status messages;
 - receiving enterprise device status requests from the superintendent system at the reporting and maintenance computer system;
 - forming responses to enterprise device status requests at the reporting and maintenance computer system;
 - and sending the responses from the reporting and maintenance computer system to the superintendent system.
2. The method of claim 1, further comprising:
 - prior to said forming, querying an enterprise device for status;
 - said forming produces a response using the result of said querying.
3. The method of claim 1, further comprising:
 - maintaining a database reflecting the state of enterprise devices;
 - said forming produces a response using the database.
4. The method of claim 3, further comprising the steps of:
 - periodically polling enterprise devices for status;
 - and entering the polled status into the database.

5. The method of claim 1, further comprising:

categorizing the responses into at least two priority groups;

and said sending is performed with respect to priority.

6. The method of claim 1, further comprising:

translating communications at the reporting and maintenance computer system between a first protocol and a second protocol, the first protocol being used for communications between the reporting and maintenance computer system and at least one enterprise device, and the second protocol being used for communications between the reporting and maintenance computer system and the superintendent system.

7. The method of claim 6 wherein the first protocol is the SNMP protocol.

8. The method of claim 6 wherein the first protocol is the HTTP protocol.

9. The method of claim 6 wherein the second protocol is a notification channel protocol.

10. The method of claim 1 wherein the first communications channel is an encrypted channel.

11. A method of monitoring the state of at least one enterprise device, said method comprising:

providing a reporting and maintenance computer system being connectable to said enterprise devices;

connecting a superintendent system to the reporting and maintenance computer system, said connecting producing a first communications channel;

connecting an enterprise to the reporting and maintenance computer system, the enterprise including at least one enterprise device that can be enabled to send status messages;

receiving first enterprise device status messages at the reporting and maintenance computer system from the enterprise devices within the enterprise;

filtering the enterprise device status messages using a filter criteria;

and sending second filtered enterprise device status messages from the reporting and maintenance system to the superintendent system over the first communications channel.

12. The method of claim 11 wherein said filtering is through policy.

13. The method of claim 11 wherein the first communications channel is an encrypted channel.

14. The method of claim 11, further comprising the step of:

periodically polling enterprise devices for status.

15. The method of claim 11, further comprising:

categorizing second enterprise device status messages into at least two priority groups;

and said sending is performed with respect to priority.

16. The method of claim 11, further comprising:

translating first enterprise device status messages from a first protocol to a second protocol;

said receiving of second device status messages receives the first messages in the first protocol;

and said sending of second device status messages uses the product of said translating.

17. The method of claim 16, wherein the first protocol is the SNMP protocol.

18. The method of claim 16, wherein the first protocol is the HTTP protocol.

19. The method of claim 16, wherein the second protocol is a notification channel protocol.

20. A method for determining the state of a remotely located enterprise, comprising:

accessing a reporting and maintenance system having at least two redundant servers, a control unit whereby the power of the servers may be controlled, a cabinet restricting access to the servers, an electronic door lock remotely and locally controllable, two temperature sensors monitoring the temperature of the air inside and outside the cabinet, an alarm, and a camera, the reporting and maintenance system being operably connected to communicate with enterprise devices in an enterprise;

sending a request to the reporting and maintenance system requesting the status of a particular enterprise device;

receiving a response from the reporting and maintenance system including the status of the particular enterprise device;

and providing a visual indication of the status of the particular enterprise device.

21. A method for managing an enterprise comprising:

assembling an enterprise management system having a central information system and an interfacing device whereby an administrator may interact with the central information system, such interaction being at least the display of enterprise device state, the enterprise management system further having a transferential system enabled to communicate in network fashion with the central information system and with the enterprise devices of the enterprise, the transferential system having at least a high priority message queue and a low priority message queue;

testing for the presence of a message in the high priority queue;

on condition of presence of a message in the high priority queue, sending and deleting a message from the high priority queue;

on condition of absence of a message in the high priority queue, testing for a message in the low priority queue;

and on condition of absence of a message in the high priority queue and presence of a message in the low priority queue, sending and deleting a message from the low priority queue.

22. A method for remotely accessing and viewing information about an enterprise, comprising the steps of:
accessing a transferential system that has the following characteristics:

a server group including at least one servers,

at least one non-volatile memory device incorporated to said server group,

server network hardware connected to said server group, said server network hardware including a gateway, said server network hardware being configurable to provide encrypted electronic communication between said server group and a superintendent system through said gateway, said server network hardware being further configurable to provide electronic communication between said server group and at least one enterprise device in communicative proximity,

first computer readable instructions installed to said memory devices, said first instructions providing the function of receiving first messages from enterprise devices in at least one enterprise management protocol including version 1 of SNMP,

second computer readable instructions installed to said memory devices, said second instructions providing the function of forwarding the information contained in the first messages to a superintendent system by a notification channel in preferential order by an assigned priority,

third computer readable instructions installed to said memory devices, said third instructions providing the function of filtering the first messages, the filtering preventing the forwarding of some of the first messages, said filtering prescribed by policy,

fourth computer readable instructions installed to said memory devices, said fourth instructions providing the function of assigning priority to the information in said first messages,

fifth computer readable instructions installed to said memory devices, said instructions providing the function of translating the first received messages to a second protocol,

a cabinet housing said server group,

a first network enabled temperature sensor, said first temperature sensor positioned to monitor the temperature of the air at the interior of said cabinet,

a second network enabled temperature sensor, said second temperature sensor positioned to monitor the temperature of the air outside said cabinet,

at least one door included in said cabinet whereby access to said server group is restricted when said doors are in closed position,

locks included in said doors whereby said doors may be secured in a closed position,

a network enabled power controller connected to and being configurable to control the power of at least one server of said server group, said power controller being configurable to accept network commands from a superintendent system,

sixth computer readable instructions installed to said memory devices, said instructions providing the function of receiving second messages from a superintendent system through a notification channel, said second messages referencing at least one enterprise device,

seventh computer readable instructions installed to said memory devices, said instructions providing the function of translating the second received messages to an enterprise management protocol utilized by the referenced enterprise devices,

eighth computer readable instructions installed to said memory devices, said instructions providing the function of forwarding the information in the second messages to the referenced enterprise devices in at least one enterprise management protocol including version 1 of the simple network management protocol,

enterprise devices in electronic communication with said server group through said server network hardware,

a superintendent system in electronic communication with said server group through said server network hardware,

ninth computer readable instructions installed to said memory devices, said ninth instructions providing the function of accepting network parameters that define the boundaries of an enterprise, said ninth

instructions also providing the function of discovering enterprise devices through said server network hardware using the network parameters,

and tenth computer readable instructions installed to said memory devices, said tenth instructions providing the function of receiving a software upgrade from a superintendent system, said tenth instructions also providing the function of delivering the software upgrade to enterprise devices;

utilizing the transferential system to access an enterprise;

and utilizing the transferential system to view information about the status and operation of the enterprise and its components.

23. The method of claim 22, further comprising the step of:

using information gained about the enterprise to generate policy.

24. The method of claim 22, further comprising the step of:

using information gained about the enterprise to initiate a physical action.

25. The method of claim 22, further comprising the step of:

utilizing the transferential system to make a modification to the enterprise.

26. A method for remotely accessing and viewing information about an enterprise, comprising the steps of:

accessing a transferential system that has the following characteristics:

a server group including at least two servers, said servers providing redundancy of operation,

at least one non-volatile memory device incorporated to said server group,

server network hardware connected to said server group, said server network hardware

including a gateway, said server network hardware being configurable to provide encrypted electronic communication between said server group and a superintendent system through said gateway, said server network hardware being further configurable to provide electronic communication between said server group and at least one enterprise device in communicative proximity,

first computer readable instructions installed to said memory devices, said first instructions providing the function of receiving first messages from enterprise devices in at least one enterprise management protocol including version 1 of SNMP,

second computer readable instructions installed to said memory devices, said second instructions providing the function of forwarding the information contained in the first messages to a superintendent system by a notification channel in preferential order by an assigned priority,

third computer readable instructions installed to said memory devices, said third instructions providing the function of filtering the first messages, the filtering preventing the forwarding of some of the first messages, said filtering prescribed by policy,

fourth computer readable instructions installed to said memory devices, said fourth instructions providing the function of assigning priority to the information in said first messages,

fifth computer readable instructions installed to said memory devices, said instructions providing the function of translating the first received messages to a second protocol,

a cabinet housing said server group,

a first network enabled temperature sensor, said first temperature sensor positioned to monitor the temperature of the air at the interior of said cabinet,

a second network enabled temperature sensor, said second temperature sensor positioned to monitor the temperature of the air outside said cabinet,

at least one door included in said cabinet whereby access to said server group is restricted when said doors are in closed position,

locks included in said doors whereby said doors may be secured in a closed position, said locks enabled to unlock through an electronic command message from a superintendent system,

a data entry device connected to said locks, said data entry device being mounted to said cabinet, said data entry device providing a human interface external to the cabinet enclosure; said locks enabled to be unlocked through said data entry device,

a network enabled camera whereby a space in proximity to said server group may be monitored,

an alarm in proximity to said server group,

a network enabled power controller connected to and being configurable to control the power of at least one server of said server group, said power controller being configurable to accept network commands from a superintendent system,

sixth computer readable instructions installed to said memory devices, said instructions providing the function of receiving second messages from a superintendent system through a notification channel, said second messages referencing at least one enterprise device,

seventh computer readable instructions installed to said memory devices, said instructions providing the function of translating the second received messages to an enterprise management protocol utilized by the referenced enterprise devices,

eighth computer readable instructions installed to said memory devices, said instructions providing the function of forwarding the information in the second messages to the referenced enterprise devices in at least one enterprise management protocol including version 1 of the simple network management protocol,

enterprise devices in electronic communication with said server group through said server network hardware,

a superintendent system in electronic communication with said server group through said server network hardware,

ninth computer readable instructions installed to said memory devices, said ninth instructions providing the function of accepting network parameters that define the boundaries of an enterprise, said ninth instructions also providing the function of discovering enterprise devices through said server network hardware using the network parameters,

and tenth computer readable instructions installed to said memory devices, said tenth instructions providing the function of receiving a software upgrade from a superintendent system, said tenth instructions also providing the function of delivering the software upgrade to enterprise devices;

utilizing the transferential system to access an enterprise;

and utilizing the transferential system to view information about the status and operation of the enterprise and its components.

27. The method of claim 26, further comprising the step of:

using information gained about the enterprise to generate policy.

28. The method of claim 26, further comprising the step of:

using information gained about the enterprise to initiate a physical action.

29. The method of claim 26, further comprising the step of:

utilizing the transferential system to make a modification to the enterprise.